

*Sub A27*  
 1. A communication system for passing over a twisted  
 2 wire pair network communication between a plurality of  
 3 terminal devices, including one or more telephones, and a  
 4 plurality of information services, including a telephone  
 5 exchange and other information services, comprising:  
 6 a main information interface coupled to the information  
 7 services;  
 8 a twisted pair wiring network coupled to the terminal  
 9 devices and to the main information interface, including a  
 10 plurality of active telephone pairs for passing voice  
 11 signals between the telephone exchange and the one or more  
 12 telephones;  
 13 wherein the information interface includes circuitry  
 14 for combining on the active telephone pairs (a) telephone  
 15 signals in a telephone frequency band passing between the  
 16 telephone exchange and the one or more telephones and (b)  
 17 high frequency signals in a high band of frequencies higher  
 18 than those of the telephone frequency band passing  
 19 information between the other information services and one  
 20 or more of the terminal devices.

2. The communication system of claim 1 wherein the  
 2 other information services includes a data network and the  
 3 plurality of terminal devices includes a computer, and  
 4 wherein the main information interface further includes a  
 5 data hub for passing information between the computer and  
 6 the data network.

3. The communication system of claim 2 wherein the  
 2 other information services further includes a television  
 3 distribution service.

1 4. The communication system of claim 2 wherein the  
2 twisted pair wiring network includes a plurality of cables  
3 coupled to the main information interface and to the  
4 terminal devices, and the cables form branching paths from  
5 the main information interface to the terminal devices, and  
6 the wiring network includes junctions at branch points of  
7 the cables for reducing degradation of signals in the high  
8 frequency band.

1 5. The system of claim 1 wherein the plurality of  
2 terminal devices includes a television receiver and an  
3 associated remote control device, and the main information  
4 interface includes a video selector that is coupled to one  
5 of the information services and that includes a receiver for  
6 accepting control information sent from the remote control  
7 device over the twisted pair wiring network in the high  
8 frequency band and a transmitter for providing a television  
9 signal to the television receiver over the twisted pair  
10 wiring network in the high frequency band in response to the  
11 control information.

1 6. The system of claim 5 wherein the video selector  
2 includes a tuner for selecting a television broadcast.

1 7. The system of claim 6 wherein the video selector  
2 includes a computer coupled to a data network, and the  
3 control information includes information identifying a  
4 source of video information on the data network.

1 8. The communication system of claim 1 further  
2 comprising privacy circuitry for preventing information  
3 passing between a terminal device and an information service  
4 from passing to another terminal device.

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1        9.    The system of claim 8 wherein the plurality of  
2 information services includes a data network and the privacy  
3 circuitry includes a data hub that has a plurality of ports  
4 coupled to terminal devices and a port coupled to the data  
5 network and the data hub includes circuitry for inhibiting  
6 transmission of data received on one port that is coupled to  
7 a terminal device to ports coupled to other terminal  
8 devices.

1        10.   The system of claim 9 wherein the hub further  
2 includes circuitry for inhibiting transmission of data  
3 addressed to a terminal device that is received on the port  
4 coupled to the data network to ports other than the port to  
5 which the addressed terminal device is coupled.

1        11.   The system of claim 1 further comprising circuitry  
2 for reducing degradation of signals passing over the wiring  
3 network.

1        12.   The system of claim 11 wherein the circuitry for  
2 reducing degradation of signals includes circuitry for  
3 amplifying signals, and circuitry for equalizing signals.

1        13.   The system of claim 11 wherein the plurality of  
2 information services includes a data network, and the system  
3 further includes a data hub coupled through a plurality of  
4 ports to the wiring network, and the circuitry for reducing  
5 degradation of signals passing over the wiring network  
6 includes circuitry for reducing crosstalk between wire pairs  
7 coupled to the plurality ports.

1        14.   The system of claim 1 further comprising a media  
2 converter, wherein the media converter is coupled to an  
3 information service over a number of conductors and is  
4 coupled to the wiring network over a fewer number of  
5 conductors, and the media converter includes circuitry for

6 receiving information from the information service over the  
7 number of conductors and transmitting that information onto  
8 the wiring network over the fewer number of conductors.

1 15. The system of claim 14 wherein the media adapter  
2 converts 10BaseT signals received over two wire pairs to a  
3 signal transmitted onto one wiring pair.

1 16. A method for passing over a twisted wire pair  
2 network communication between a plurality of terminal  
3 devices, including one or more telephones, and a plurality  
4 of information services, including a telephone exchange and  
5 other information services, the method comprising:

6 passing voice signals between the telephone exchange  
7 and the one or more telephones over active telephone pairs  
8 of a twisted wire network which coupled the information  
9 services and the terminal devices;

10 combining on the active telephone pairs (a) telephone  
11 signals in a telephone frequency band passing between the  
12 telephone exchange and the one or more telephones and (b)  
13 high frequency signals in a high band of frequencies higher  
14 than those of the telephone frequency band passing  
15 information between the other information services and one  
16 or more of the terminal devices.

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